United Nations

Framework Convention on Climate Change

FCCC/SBI/2014/INF.3

Distr.: General
9 May 2014

English only

Subsidiary Body for Implementation
Fortieth session
Bonn, 4–15 June 2014

Item 11(b) of the provisional agenda
Development and transfer of technologies and implementation of the Technology Mechanism
Poznan strategic programme on technology transfer

Report of the Global Environment Facility on the progress made in carrying out the Poznan strategic programme on technology transfer

Note by the secretariat*

1. At its thirty-fourth session, the Subsidiary Body for Implementation (SBI) invited the Global Environment Facility (GEF) to provide reports on the progress made in carrying out its activities under the Poznan strategic programme on technology transfer, for consideration at subsequent SBI sessions, for the duration of the programme.[1]

2. At SBI 39, the SBI invited the GEF to continue to consult with the Climate Technology Centre and Network (CTCN), through its Advisory Board and the United Nations Environment Programme as the host of the Climate Technology Centre, on the support that the GEF will provide for the work of the CTCN and to report on the concrete results of the consultations at SBI 40.[2]

3. In response, the GEF secretariat has submitted the report in the annex, dated 6 May 2014, which is reproduced here as submitted, without formal editing and with the original pagination.

* This document was received from the Global Environment Facility secretariat on 7 May 2014.
[1] FCCC/SBI/2011/7, paragraph 137.
[2] FCCC/SBI/2013/20, paragraph 137.

GE.14-60866
1460866

Please recycle

Blank page

Annex

GLOBAL ENVIRONMENT FACILITY

May 6, 2014

IMPLEMENTATION OF THE POZNAN STRATEGIC AND LONG-TERM PROGRAMS ON TECHNOLOGY TRANSFER

AND

GEF CONSULTATION WITH THE CLIMATE TECHNOLOGY CENTER AND NETWORK

A PROGRESS REPORT OF THE GEF TO THE SUBSIDIARY BODY FOR IMPLEMENTATION AT ITS FORTIETH SESSION

Table of Contents

Table of Contents i

Abbreviations and Acronyms ii

Part I. Relevant UNFCCC guidance 4

Part II. Implementation of the Poznan Strategic and Long-Term Programs on Technology Transfer 7

A. Support for Climate Technology Centers and a Climate Technology Network 8

B. Piloting Priority Technology Projects to Foster Innovation and Investments 11

b.1. Technology Transfer Pilot Projects within the Poznan Strategic Program 11

b.2. Technology Transfer Projects within the Long-Term Implementation of the Poznan Strategic Program 11

C. Public-Private Partnerships for Technology Transfer 12

D. Technology Needs Assessments 12

d.1. Technology Needs Assessment support within the Poznan Strategic Program 12

d.2. Technology Needs Assessment support within the Long-Term Implementation of the Poznan Strategic Program 13

E. GEF as a Catalytic Supporting Institution for Technology Transfer 13

Part III. GEF consultation with the Climate Technology Center and Network 14

Appendix 1. Technology Transfer Projects Support in line with the Long-Term Program on Technology Transfer 17

Appendix 2. Implementation of the Poznan Strategic Program on Technology Transfer 24

Appendix 3. Implementation Progress of Technology Transfer Pilot Projects Under the Poznan Strategic Program (as of March 30, 2014) 29

Appendix 4. Climate change technology transfer projects supported in line with the Long-Term Program on Technology Transfer 31

Appendix 5. GEF secretariat consultations with the CTCN 35

Abbreviations and Acronyms

AB	Advisory Board
AC	Adaptation Committee
ADB	Asian Development Bank
AfDB	African Development Bank
BUR	Biennial Update Report
CATIE	Centro Agronómico Tropical de Investigación y Enseñanza
CEO	Chief Executive Officer
CI	Conservation International
CO_2	Carbon Dioxide Equivalent
COP	Conference of the Parties
CTC	Climate Technology Centre
CTCN	Climate Technology Centre and Network
DoT	Department of Transport
EbA	Ecosystem-based Adaptation
EBRD	European Bank for Reconstruction and Development
ENDA	Environmental Development Action
EST	Environmentally Sound Technology
ETC	Early Transition Countries
FAO	Food and Agriculture Organization of the United Nations
FSP	Full-Sized Project
FY	Fiscal Year
GEF	Global Environment Facility
GHG	Greenhouse Gas
HCFC	Hydro-chlorofluorocarbon
HFO	hydrofluoroolefin
IDB	Inter-American Development Bank
IFAD	International Fund for Agricultural Development
IPCC	Intergovernmental Panel on Climate Change
LAC	Latin America and the Caribbean
LCT	Low Carbon Technology
LED	Light Emitting Diode
LDCF	Least Developed Countries Fund
MSP	Medium-Sized Project
NAP	National Adaptation Plan
NC	National Communication
NDE	Nationally Designated Entities
NDRC	National Development and Reform Commission
ODS	Ozone Depleting Substances
PPP	Public-Private Partnership
PRC	People's Republic of China
R2R	Ridge to Reef
SBI	Subsidiary Body for Implementation
SCCF	Special Climate Change Fund
SCCF-A	Special Climate Change Fund Adaptation Program
SCCF-B	Special Climate Change Fund Program for Technology Transfer

SME	Small and Medium Enterprise
SNC	Second National Communication
TAP	Technology Action Plan
TEC	Technology Executive Committee
TNA	Technology Needs Assessment
TNC	Third National Communication
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNEP-IEMP	UNEP-International Ecosystem Management Partnership
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
VC	Venture Capital
WB	World Bank

1. The Global Environment Facility (GEF) prepared this progress report for the fortieth session of the Subsidiary Body for Implementation (SBI 40) to the United Nations Framework Convention on Climate Change (UNFCCC), as per guidance given:

(a) At the thirty-second session of SBI, whereby the GEF was invited to provide half-yearly progress reports on the implementation of the activities receiving support under the Poznan strategic programme; and

(b) At the thirty-ninth session of SBI, whereby the GEF was invited the GEF to continue to consult with the Climate Technology Centre and Network (CTCN), through its Advisory Board and the United Nations Environment Programme as the host of the Climate Technology Centre, on the support that the GEF will provide for the work of the CTCN and to report on the concrete results of the consultations at SBI 40.

2. The report covers the period of July 2013 to March 2014. Details of the key relevant guidance from the past UNFCCC Conferences of the Parties (COP) and SBIs are listed in the following paragraphs.

Part I. Relevant UNFCCC guidance

3. The Conference of the Parties to the UNFCCC at its fourteenth session (COP 14) welcomed the GEF's Strategic Program on Technology Transfer (renaming it the Poznan Strategic Program on Technology Transfer) in COP decision 2/CP.14, as "a step towards scaling up the level of investment in technology transfer in order to help developing countries address their needs for environmentally sound technologies" and recognized "the contribution that this strategic programme could make to enhancing technology transfer activities under the Convention."

4. COP decision 2/CP.14, in Paragraph 2, requested the GEF to:

(a) To promptly initiate and expeditiously facilitate the preparation of projects for approval and implementation under the strategic programme referred to in paragraph 1 in order to help developing countries address their needs for environmentally sound technologies;

(b) To collaborate with its implementing agencies in order to provide technical support to developing countries in preparing or updating, as appropriate, their technology needs assessments using the updated handbook for conducting technology needs assessments for climate change published by the United Nations Development Programme, to be made available in early 2009 in collaboration with the Expert Group on Technology Transfer, the UNFCCC secretariat and the Climate Technology Initiative;

(c) To consider the long-term implementation of the strategic programme, including: addressing the gaps identified in current operations of the Global Environment Facility that relate to investment in the transfer of environmentally sound technologies; leveraging private-sector investment; and promoting innovative project development activities;

(d) To report on the progress made in carrying out the activities referred to in paragraph 2 (a-c) above to the Conference of the Parties at its sixteenth session, in addition to providing interim reports to the Subsidiary Body for Implementation at its thirtieth and thirty-first sessions, with a view to assessing its progress and future direction in order to help inform Parties in their consideration of long-term needs for implementation of the strategic programme.

5. In accordance with decision 2/CP.14, the GEF presented interim reports to SBI 30 and SBI 31, respectively, on the progress made in carrying out the Poznan Strategic Program on Technology Transfer. Subsequently, the conclusions of SBI 31 (FCCC/SBI/2009/15, paragraph 67) invited the GEF to provide a report on the progress made on the implementation of this program at SBI 32, including on the long-term aspects of the Poznan Strategic Program. In response to the above conclusions of SBI 31, the GEF presented an interim report to SBI 32.

6. In accordance with decision 2/CP.14, the GEF presented a report to COP 16 on the progress made in carrying out the activities of the Poznan Strategic Program on Technology Transfer.

7. Conclusions from the SBI 34 agenda item 12 on the development and transfer of technologies (FCCC/SBI/2011/7, paragraphs 134–137) stated the following:

(a) The SBI noted the oral report by the GEF and expressed its appreciation to the GEF and its agencies, the United Nations Development Programme and the United Nations Environment Programme on the progress made in carrying out the Poznan strategic programme on technology transfer.

(b) The SBI welcomed the progress made in providing technical and financial support to assist 36 non-Annex I Parties in developing and updating their technology needs assessments (TNAs). The SBI noted that many non-Annex I Parties expressed their interest to conduct or update their TNAs. The SBI recommended that the COP, at its seventeenth session, invite the GEF to continue to provide financial support to other non-Annex I Parties, as appropriate, to conduct or update their TNAs, noting the availability of the updated handbook *Conducting Technology Needs Assessments for Climate Change*.

(c) The SBI welcomed the progress made by the GEF in providing support for piloting priority technology projects as part of the Poznan strategic programme. The SBI noted that the pilot project proposals submitted by non-Annex I Parties and supported by the GEF included only one project on technologies for adaptation. The SBI also noted the importance of projects on technologies for adaptation, including on the development and strengthening of local knowledge, and invited the GEF, Parties and relevant organizations in a position to do so to provide financial support for project proposals, including those for pilot projects, of the types supported by the Poznan strategic programme related to technologies for adaptation.

(d) The SBI recalled the conclusions of its thirty-second session inviting the GEF to provide half-yearly progress reports on the implementation of the activities receiving support under the Poznan strategic programme. It invited the GEF to provide reports on the progress made in carrying out its activities under the Poznan strategic programme, including its long-term implementation, for consideration by the SBI at its thirty-fifth and subsequent sessions, for the duration of the Poznan strategic programme.

8. In accordance with SBI 34 agenda item 12 conclusions, and their reiteration by the SBI 35 agenda item 11 (FCCC/SBI/2011/17, paragraphs 95–100), the GEF presented its progress in carrying out activities under the Poznan strategic program and its Long Term Implementation Program to COP 17, to SBI 36 and SBI 37.

9. Conclusions of the SBI 36 agenda item 12, Development and transfer of technologies (c) Poznan strategic programme on technology transfer (FCCC/SBI/2012/15, paragraphs 195 to 200), stated that:

(a) The SBI noted the report by the GEF on the progress made in carrying out the Poznan strategic

programme on technology transfer, as invited by the SBI 34;

(b) The SBI noted the support provided by the GEF for the implementation of technology transfer pilot projects under the Poznan strategic programme and the views expressed by Parties on the need to balance support for mitigation and adaptation projects. It invited the GEF to enhance the balance between adaptation and mitigation projects in the long-term implementation of the Poznan strategic programme, including by enhancing its outreach and awareness-raising efforts on funding opportunities for projects related to technologies for adaptation. It recalled its conclusion at SBI 35 encouraging non-Annex I Parties to submit project proposals, particularly for technologies for adaptation, to the GEF in line with the elements of the long-term programme described in document FCCC/SBI/2011/14, annex, paragraphs 46 and 47;

(c) The SBI invited the GEF and its implementing agencies to expedite the process for the implementation and completion of the remaining technology transfer pilot projects submitted in 2009 for support under the Poznan strategic programme;

(d) The SBI acknowledged the support provided by the GEF to assist 36 non-Annex I Parties in conducting their TNAs. It recalled decision 11/CP.17, paragraph 2, which invited the GEF, in the context of TNAs, to continue to provide financial support to other non-Annex I Parties, as appropriate, to conduct or update their TNAs;

(e) The SBI recalled the conclusion at SBI 34 inviting the GEF to provide reports on the progress made in carrying out its activities under the Poznan strategic programme, including its long-term implementation, for consideration by the SBI 35 and subsequent sessions. The SBI invited the GEF in its future progress reports to further elaborate on:

1) The activities undertaken by the GEF to enhance its outreach and awareness raising efforts on funding opportunities for projects related to technologies for adaptation in order to address the need for balanced support for projects related to technologies for adaptation;

2) Experiences gained and lessons learned, including success stories and challenges faced in carrying out the activities under the Poznan strategic programme;

3) Progress made by its implementing agencies in the delivery of technology transfer under the Poznan strategic programme;

4) The efforts carried out to support, pursuant to decision 2/CP.17, the operationalization and activities of the Climate Technology Centre and Network.

(f) The SBI stressed the need for the further implementation of the element of the Poznan strategic programme included in document FCCC/SBI/2012/9, paragraph 23(a), to be aligned with, and to enable, the operationalization and activities of the CTC and its Network, taking into account document FCCC/SBI/2012/15, paragraphs 185 and 187, and decision 2/CP.17, paragraph 140.

10. Conclusions of the SBI 37 agenda item 13(c) FCCC/SBI/2012/33, paragraphs 121–124) stated the following:

(g) The SBI noted the report of the GEF on the progress made in carrying out the Poznan strategic programme on technology transfer

(h) The SBI acknowledged the support provided by the GEF to assist 36 Parties not included in Annex I

to the Convention (non-Annex I Parties) in conducting their TNAs. It reiterated decision 11/CP.17, paragraph 2, in which the GEF was invited to continue to provide financial support to other non-Annex I Parties, as appropriate, to conduct or update their TNAs. It invited the GEF to report on its support provided to other non-Annex I Parties to conduct or update their TNAs in its report to the Conference of the Parties at its nineteenth session.

(i) The SBI stressed the need for the further implementation of the element of the Poznan strategic programme on support for climate technology centres and a climate technology network, which should be aligned with, and support, the operationalization and activities of the Climate Technology Centre and Network (CTCN), taking into account decision 2/CP.17, paragraph 140.

(j) The SBI invited the GEF to consult with the CTCN, through its advisory board, on the support the GEF will provide for the work of the CTCN and to report on the findings of those consultations to the COP at its nineteenth session.

11. Under SBI 39 agenda item 13(c), Poznan strategic programme on technology transfer (FCCC/SBI/2013/L.4):

(a) The SBI noted the report of the GEF on the progress made in carrying out the Poznan strategic programme on technology transfer.

(b) The SBI acknowledged the support provided by the GEF to assist 36 Parties not included in Annex I to the Convention (non-Annex I Parties) in conducting their technology needs assessments and welcomed the financial and technical support that the GEF will provide to 24 non-Annex I Parties for conducting or updating their technology needs assessments.

(c) The SBI noted the report of the GEF2 on the findings of its consultations with the CTCN, through its Advisory Board, as requested at SBI 37.

(d) The SBI invited the GEF to continue to consult with the CTCN, through its Advisory Board and the United Nations Environment Programme as the host of the Climate Technology Centre, on the support that the GEF will provide for the work of the CTCN and to report on the concrete results of the consultations at SBI 40 (June 2014).

(e) The SBI reiterated the need to align the further implementation of the element of the Poznan strategic programme on support for climate technology centres and a climate technology network with the operationalization and activities of the CTCN, taking into account decision 2/CP.17, paragraph 140.

Part II. Implementation of the Poznan Strategic and Long-Term Programs on Technology Transfer

12. The transfer of low-carbon and climate-resilient technologies has been a key cross-cutting theme for the GEF since the establishment of its funds. The GEF-5 climate change mitigation strategy promotes technology transfer at various stages of the technology development cycle, from demonstration of innovative emerging low-carbon technologies to diffusion of commercially proven environmentally sound technologies (ESTs) and practices. Similarly, the results-based management framework for the Special Climate Change Fund (SCCF) and the Least Developed Countries Fund (LDCF) includes the transfer and adoption of adaptation technology as one of three overarching objectives of the funds. The entire GEF climate change portfolio can be characterized as supporting technology transfer as defined by the

Intergovernmental Panel on Climate Change (IPCC) and by the technology transfer framework adopted by COP 7.[1]

13. In November 2008, the GEF Council and the LDCF/SCCF Council approved the Strategic Program on Technology Transfer, which included a funding window of $50 million with $35 million from the GEF Trust Fund and $15 million from the SCCF Program for Technology Transfer (SCCF-B). This program included three funding windows to support technology transfer under the Poznan Strategic Program, namely: (1) TNAs; (2) piloting priority technology projects linked to TNAs; and (3) dissemination of GEF experience and successfully demonstrated ESTs.

14. In December 2008, COP 14 welcomed the GEF's Strategic Program on Technology Transfer (renaming it the Poznan Strategic Program on Technology Transfer) as a step toward scaling up the level of investment in the transfer of ESTs to developing countries. In response to decision 2/CP.14, the GEF submitted a Long-Term Program on Technology Transfer to COP 16. The GEF submission included the following elements to further scale up investment in ESTs in developing countries in accordance with the GEF climate change strategy, and to enhance technology transfer activities under the Convention:

(a) Support for Climate Technology Centers and a Climate Technology Network;

(b) Piloting Priority Technology Projects to Foster Innovation and Investments;

(c) Public-Private Partnership (PPP) for Technology Transfer;

(d) TNAs; and,

(e) GEF as a Catalytic Supporting Institution for Technology Transfer.

15. Three of these elements (piloting projects, TNAs, and the last one on outreach) are a direct continuation and scaling up of the initial Poznan Strategic Program. The other two elements (support for Climate Technology Centers and Networks and PPP) are new, underlining the continuous effort by the GEF to find innovative ways to support greater technology transfer and to respond to COP guidance.

16. The following sub-sections describe progress made in each of the five elements of the Long-Term Program on Technology Transfer. Projects supported under the five windows during the reporting period are summarized in Annex 5.

A. Support for Climate Technology Centers and a Climate Technology Network

17. The GEF is supporting four regional projects listed in Table 1. All projects receive funding from the GEF Trust Fund for mitigation as well as from the SCCF-B in support of adaptation. They are expected to generate lessons learned to help inform the ongoing process to operationalize the Technology Mechanism, in particular the CTCN, in conjunction with other efforts underway to facilitate coordination and cooperation. Approved by the GEF Council in May 2011 and June 2012 in line with the Long-Term Program on Technology Transfer, the projects have reported progress as summarized below, and described in further detail in Appendix 1:

(a) The project "*Pilot Asia-Pacific Climate Technology Network and Finance Center*", endorsed by the GEF CEO in May 2012, has started implementation with the Asian Development Bank (ADB) and the United Nations Environment Programme (UNEP). Its second steering committee meeting took place in November 2013 in Warsaw, Poland.

[1] Decision 4/CP.7.

(b) The project "*Finance and Technology Transfer Centre for Climate Change*" by the European Bank for Reconstruction and Development (EBRD), endorsed by the GEF CEO in July 2013, has started implementation.

(c) The project "*Pilot African Climate Technology Finance Center and Network*" by the African Development Bank (AfDB) is expected to be endorsed by the GEF CEO by May 2014. It has identified regional partners that are part of the CTC consortium headed by UNEP;

(d) The GEF is awaiting the submission of CEO Endorsement request for the remaining regional project "*Climate Technology Transfer Mechanisms and Networks in Latin America and the Caribbean*" by the Inter-American Development Bank (IDB). IDB has identified regional partners that are part of the CTC consortium headed by UNEP (e.g. Centro Agronómico Tropical de Investigación y Enseñanza (CATIE) in Costa Rica and Fundación Bariloche in Argentina);

18. At the national level, the GEF is supporting the following initiatives aiming at developing climate technology transfer and financing mechanisms:

(a) The "*Sustainable Energy Technology Development*" project in Mexico by the World Bank supports the development of new and innovative clean energy technologies (energy efficiency, renewable energy) through the linking of the public, academic and productive sectors in Mexico. The project will be coordinated with the IDB project "*Climate Technology Transfer Mechanisms and Networks in Latin America and the Caribbean*" and with the forthcoming CTCN to make use of potential complementarity and avoid duplication of efforts. The project is expected to be endorsed by the GEF CEO in April 2014;

(b) The "*Facility for Low Carbon Technology Deployment*" project in India by the World Bank supports identification and deployment of low carbon technologies in India that can address technology gaps to mitigate climate change and improve the economy's energy efficiency. The Facility is expected to become part of the network with the CTCN and to be able to be a connecting node with other climate technology centers in developing countries. The project is expected to be endorsed by the GEF CEO in July 2014;

(c) A third national project "*Low Carbon Technology Transfer in the Russian Federation*" by the United Nations Industrial Development Organization (UNIDO) will be presented to the GEF Council for approval in May 2014. The project aims at increasing and accelerating the transfer and deployment of low-carbon technologies (LCT) through the establishment of institutional mechanisms, pilot demonstration investments in LCT manufacturing capacity transfer, increased availability of financing for LCTs transfer and applications projects and enhanced policy frameworks.

Table 1

GEF Regional Projects for Climate Technology Transfer and Financing Centers

Title	*Region*	*Agency*	*GEF financing ($ millions)* GEF Trust Fund	SCCF	*Co-financing ($ millions)*	*Status*
Pilot Asia-Pacific Climate Technology Network and Finance Center	Asia and Pacific	ADB/ UNEP	10.0	2.0	74.7	CEO Endorsed
Pilot African Climate Technology Finance Center and Network	Africa	AfDB	10.0	5.8	89.0	Council approved[a]
Regional Climate Technology Transfer Center	Europe and Central Asia	EBRD	10.0	2.0	77.0	CEO Endorsed
Climate Technology Transfer Mechanisms and Networks in Latin America and the Caribbean	Latin America and the Caribbean	IDB	10.0	2.0	63.4	Council approved

[a] This project is expected to be CEO endorsed by May 2014.

19. Furthermore, the following national or global climate change mitigation initiatives with potential links to the CTCN reported progress during the reporting period:

(a) The project "*Enhancing Capacity, Knowledge and Technology Support to Build Climate Resilience of Vulnerable Developing Countries*" by UNEP started implementation. The project aims at reducing risks from increased desertification, floods and erosion, and sea level rise to the target communities in the identified project sites in Mauritania, Nepal and Seychelles respectively. The information gathered by the project is expected to be referenced as part of the Knowledge Management System of the CTCN.

(b) The "Global Cleantech Programme for SMEs" by UNIDO has been under implementation since November 8, 2013. Currently the programme includes medium size projects (MSPs) approved in six countries (Armenia, India, Malaysia, Pakistan, South Africa and Turkey) with an objective to support policy and regulatory frameworks for innovation and the organization of clean tech competition and acceleration programs. It is foreseen that the entrepreneurs supported under the project may become possible candidates to partner with the CTCN.

(c) The "*Local Development and Promotion of LED Technologies for Advanced General Lighting*" by UNIDO was approved by the CEO in October 2013 and is undergoing the preparation of a detailed project proposal. The project aims to support quality improvement of Light Emitting Diode (LED) manufacturing to meet international quality standards, and increase use of LEDs.

20. Description of the GEF- and SCCF-funded regional and national projects supporting climate technology centers and networks for climate technology transfer and financing are presented in Appendix 1.

21. In addition to the piloting and innovative projects listed in this section or explained in previous GEF reports on the Poznan Program and its Long-Term Implementation, the GEF, with the means at its disposal and in line with GEF procedures, is ready to continue to support the operationalization and activities of the CTCN in response to decision 2/CP.17. Details on the results of GEF consultation and collaboration with the CTCN are presented in Part II of this report.

B. Piloting Priority Technology Projects to Foster Innovation and Investments

b.1. Technology Transfer Pilot Projects within the Poznan Strategic Program

22. Guided by COP decision 2/CP.14, the call for proposals for technology transfer pilot projects under window two of the Poznan Strategic Program issued in March 2009 led to the selection of 14 proposals. During the call for proposals, only one proposal for adaptation was received. This proposal was funded, along with three other proposals that included adaptation elements. Total GEF Trust Fund and SCCF-B funding for the 14 pilot projects amounted initially to $58 million, and total co-financing for these projects initially came to more than $195 million.

23. As of March 2014, GEF Agencies charged with implementing these 14 pilot projects have reported progress in project preparation and implementation:

(a) Eleven projects have been endorsed by the GEF CEO and are progressing in their implementation. These projects are taking place in Cambodia, Chile, China, Colombia, Cote d'Ivoire, Jordan, Kenya, Mexico, Russia, Sri Lanka, Swaziland and Thailand. The funding from the GEF Trust Fund and SCCF-B for these project amounts respectively to $49.4 million and $2.4 million, and the total co-financing amounts respectively to $223.2 million and $5.5 million.

(b) Three projects were cancelled upon request from the GEF Agencies and/or the concerned national government, one in July 2011, one each in February and June 2012.

24. The technologies targeted by these projects address both mitigation and adaptation, and are diverse and innovative. They include technologies on renewable energy (solar, biomass, wind), energy efficiency (insulation materials, efficient and hydro-chlorofluorocarbon- or HCFC-free appliances), transport ("green" trucks), and composting. For adaptation-related technologies, membrane drip irrigation, flood- and drought-resistant crops with sustainable land management practices, and reduction of wave energy impacts on communities and infrastructure were included.

25. In response to SBI 36 conclusions, the GEF requested the GEF Agencies to provide updates to further elaborate on the experiences gained and lessons learned in carrying out the Poznan pilot projects and progress made by the Agencies in the delivery of technology transfer. The compiled updates are presented in Appendix 2 and Appendix 3.

b.2. Technology Transfer Projects within the Long-Term Implementation of the Poznan Strategic Program

26. Most of the GEF-5 climate change portfolio can be characterized as supporting technology transfer for mitigation. In GEF-5 (Fiscal Year[2] –FY- 2011, FY 2012 and FY 2013), the GEF has supported 221 projects with technology transfer objectives with $1.5 billion of GEF funding and $11.1 billion of co-financing. Among these projects, 55 projects address the promotion and transfer of innovative low-carbon technologies, while the remaining 166 are aimed at market transformation for specific technologies. Eight of these projects incorporate both mitigation and adaptation objectives (with additional funding from the SCCF), and 71 combine climate change mitigation objectives with the objectives of other focal areas. In

[2] The GEF follows the Fiscal Year definition used by the World Bank: from July 1st of year X till June 30th of year X+1.

addition, the GEF, through the LDCF and SCCF-A, supports a considerable portfolio of adaptation projects that consistently contribute towards the demonstration, deployment and diffusion of climate-resilient technologies as part of broader strategies to reduce vulnerability.

27. During the reporting period, for climate mitigation, 62 projects with technology transfer objectives were approved with $218.9 million of GEF funding and $1.45 billion of co-financing. These include six projects supporting TNAs, 18 projects aimed at promoting and transferring innovative low-carbon technologies, and 44 addressed toward market transformation in targeted sectors. Out of 63 projects, one project incorporated both mitigation and adaptation objectives and 9 projects have multiple focal area objectives. For the LDCF and SCCF, 24 projects with technology transfer objectives were approved during the reporting period with $156.5 million of GEF funding and $0.5 billion of co-financing. A list of these projects is presented in Appendix 4.

28. Among these projects, three innovative projects financed through SCCF-B promote the transfer of adaptation technology. Among these:

(a) The project *Bosnia-Herzegovina: Technology Transfer for Climate Resilient Flood Management in Vrbas River Basin* will introduce technologies to manage flood risks, and integrate climate change information in key sector plans and policies.

(b) In Pakistan, the project *Mainstreaming Climate Change Adaptation through Water Resource Management in Leather Industrial Zone Development* will introduce water conservation and effluent treatment technologies to address human health risks and agricultural and water pollution.

C. Public-Private Partnerships for Technology Transfer

29. PPP programs can be a strong tool for promoting technology transfer by supporting businesses in developing countries that are trying to commercialize or scale up ESTs. In GEF-5, four PPP programs have been approved by the GEF Council, using $65 million of GEF grant resources to leverage over $700 million of public and private sector investment for clean energy and biodiversity protection. One additional PPP program was submitted for approval to the GEF Council in May 2014. This project targets investments in small and medium sized enterprises to foster climate smart agriculture, providing climate mitigation and land degradation benefits.

D. Technology Needs Assessments

d.1. Technology Needs Assessment support within the Poznan Strategic Program

30. The TNA project concept, under the Poznan Strategic Program, was approved by the LDCF/SCCF Council in April 2009 and endorsed by the GEF CEO in September 2009. Project implementation by UNEP started in October 2009 and was completed in April 2013. Total SCCF-B funding for this project is $9 million.

31. The TNA project aimed to provide targeted financial and technical support to assist 36 developing countries in developing and/or updating their TNAs within the framework of Article 4.5 of the UNFCCC and to support them in preparing Technology Action Plans (TAPs). The project sought to use methodologies in the updated TNA Handbook and to provide feedback to fine-tune the methodologies through an iterative process.

32. Key areas of progress that have been achieved during the reporting period include the following:

(a) Thirty-six countries are participating in the TNA project. They include:

Africa: Cote d'Ivoire, Ethiopia, Kenya, Ghana, Mali, Morocco, Mauritius, Rwanda, Senegal, Sudan, Zambia;
Asia and Europe: Azerbaijan, Bangladesh, Bhutan, Cambodia, Georgia, Indonesia, Kazakhstan, Laos, Lebanon, Moldova, Mongolia, Nepal, Sri Lanka, Thailand, Vietnam; and,
Latin America and the Caribbean: Argentina, Bolivia, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Peru.

(b) With regard to progress in TNA preparations, out of the 36 participating countries 33 finalized and submitted their TNA reports. 30 countries finalized and submitted their TAP reports.

(c) A new TNA user-friendly website has been developed with updated information from the countries (technology factsheets, completed TNA and TAP reports). UNEP, in collaboration with the UNFCCC secretariat, is planning to organize a TNA dissemination workshop in conjunction with TEC meeting in September 2014.

33. The project experience gained at this stage was presented in the GEF report to COP19.

d.2. Technology Needs Assessment support within the Long-Term Implementation of the Poznan Strategic Program

34. Progress achieved under the Poznan Strategic Program on Technology Transfer, particularly in the development of pilot projects and TNAs, has highlighted the need to go beyond current practices to catalyze investments in technology transfer. The GEF Council approved in April 2013 a new project by UNEP supporting additional TNAs and TAPs focusing on 27 low- and medium-income countries: Armenia, Belize, Burkina Faso, Burundi, Bolivia, Egypt, Gambia, Grenada, Guyana, Honduras, Jordan, Madagascar, Malaysia, Mauritania, Mozambique, Panama, Philippines, Seychelles, Swaziland, Tanzania, Togo, Tunisia, Turkmenistan, Uruguay, Uzbekistan, Kazakhstan and Lao PDR.

35. This project takes into account the lessons learned from the previous Poznan-supported TNA project. It will, in particular, seek the involvement of the funding community and key national decision makers at an early stage in the technology action planning process in order to increase the prospects of funding and implementing project proposals emanating from TAPs and TNAs. The project will also seek close coordination with the CTCN and the regional Climate Technology Transfer and Financing projects funded by the GEF in Asia, Africa, Europe and Latin America, described in paragraph 17, which have or are expected to become operational prior to the project implementation.

36. In addition, during FY 2013, the GEF Council approved six national projects incorporating TNA support activities in projects otherwise focused on the preparation of National Communications (NCs) and Biennial Update Reports (BURs):

(a) One project in Kuwait by UNEP includes the preparation of a TNA and a TAP;

(b) Three projects in Boznia-Herzegovina, by UNDP, Cote d'Ivoire, By UNEP, and Nicaragua, by UNDP include the preparation of a TNA, the project in Nicaragua being focuses on two sectors only;

(c) Two projects in Jamaica and Namibia by UNDP include the updating of existing TNAs.

E. GEF as a Catalytic Supporting Institution for Technology Transfer

37. The GEF participated in key international discussions supporting the development of technology transfer initiatives and to raise awareness about the Long-Term Program during the reporting period. Some examples include the following:

(a) At the margin of COP 19 in Warsaw, the GEF secretariat participated to a side-event on "*Fostering new financial partnerships: Promoting technology transfer and deployment in developing countries*" chaired by CTCN and organized by UNEP as part of the Caring for Climate Business Forum, 19 November 2014;

(b) The GEF secretariat participated as an observer to the second and third meeting of the CTCN Advisory Board (AB), respectively held in Bonn on September 9 to 11, 2013 and in Copenhagen on March 19 to 21, 2014;

(c) The GEF secretariat participated to a panel discussion with representatives from Governments, international organizations and the private sector on issues surrounding the implementation of the results of TNAs during the "*Workshop on Technology Needs Assessments*" organized by the Technology Executive Committee (TEC) on September 6, 2013;

(d) The GEF secretariat participated to the "*Workshop on Technologies for Adaptation*" organized by the TEC, in collaboration with the Adaptation Committee (AC), on March 4, 2014;

(e) The GEF secretariat organized the second informal coordination meeting on the GEF supported regional Technology Transfer and Financing Centers on November 4, 2013 in Washington DC, at the margin of the 45th GEF Council meeting. Participants to the meeting included representatives of ADB, UNEP, IDB, EBRD, AfDB, and the chair of the CTCN AB;

(f) The GEF secretariat also uses all opportunities offered by its participation to international initiatives and conferences to advocate for climate technology transfer and financing. Recent examples include the inclusion of the GEF CEO as member of the Advisory Board of the Sustainable Energy for All initiative, its participation to Delhi Sustainable Development Summit in February 2014, or to the World Future Energy Summit in Abu Dhabi in January 2014.

38. The GEF has been supporting dissemination of GEF experiences and of successfully demonstrated ESTs, under the Poznan Strategic Program. During this reporting period, the GEF published the following materials:

(a) Two brochures titled "*Investing in Energy Efficiency*" and "*Closing the Gap: GEF Experiences in Global Energy Efficiency*";

(b) A report from the GEF Scientific and Technical Advisory Panel: "*Managing Soil Organic Carbon for Global Benefits*";

(c) A leaflet on "*Sustainable Forest Management*".

39. The GEF website is updated periodically with specific information on technology transfer.[3]

Part III. GEF consultation with the Climate Technology Center and Network

40. During the reporting period, the GEF secretariat consulted with the CTCN on numerous occasions (see a detailed list in Appendix 5). The results of these consultations concern: (i) modalities of GEF financial support (see paragraph 41), (ii) modalities of experience sharing (see paragraph 42), and (iii) modalities enabling financing institutions to respond to requests addressed to the CTC (see paragraph 43).

[3] This information can be accessed from: http://www.thegef.org/gef/technology_transfer.

41. Regarding GEF financial support to CTCN responses to countries' requests:

(a) The GEF, with the means at its disposal and in line with GEF procedures, it is ready to support the operationalization and activities of the CTCN in response to decision 2/CP.17. The GEF secretariat highlighted its ability to fund projects that combine technical assistance, policy support, capacity building and investment that could be used to enable the CTCN (i) to respond to the most challenging requests from countries, and (ii) to develop responses that can go beyond pure technical assistance to have real impact on the ground. As highlighted during the two teleconference discussions of January 14 and February 19, 2014 (see Appendix 5 paragraph (h)), proposals submitted to the GEF for financing need to (i) be in line with GEF procedures (and, in particular, achieve concrete and estimated climate change benefits), and (ii) target countries or objectives where GEF had available funding. It was agreed that UNEP and UNIDO would try to propose options in line with those requirements;

(b) As of January 2014, the GEF secretariat had not received formal CTCN project proposals with the primary objective to support the operationalization of the CTCN;

(c) On February 15, 2014, UNEP, acting as CTC host, shared with the GEF a document titled "*Proposed areas for GEF support to the CTCN*", which was approved by the Chair of the CTCN Advisory Board and the CTCN Director. The GEF secretariat indicated that although several activities identified in UNEP's proposal were typically part of many GEF projects (e.g. support to improve policies and regulations, support for designing de-risking mechanisms), the proposal focused only on upstream technical assistance activities and would need to be associated with concrete implementation and investment activities to structure a project that would be eligible for GEF financing. The GEF secretariat proposed to help the CTCN partners identify combinations of upstream and downstream activities that, bundled into a project or a program, would comply with both the CTCN and GEF requirements. In terms of funding, the GEF suggested UNEP and UNIDO to consider targeting the climate change mitigation allocations remaining under the fifth replenishment period of the GEF (GEF-5), i.e. $2 million under the global/regional climate technology transfer set aside and $150 million remaining climate change allocations of various countries;

(d) Since then, the CTCN partners informed the GEF about their intention to work on a proposal for a $2 million global MSP. This was confirmed by the CTCN AB in March 2014, which also decided that the CTCN will not pursue GEF-5 financing from the uncommitted country allocations. The GEF secretariat has since been assisting UNEP and UNIDO to design a proposal that complies with both the CTCN and GEF requirements. The proposal is expected to be submitted to the GEF secretariat by the deadline for MSP submissions for GEF-5 at the end of April 2014 and should be designed as a pilot helping draw lessons to help mobilize national allocations to further support CTCN activities under GEF-6.

42. Regarding experience and lessons learned sharing on climate technology transfer and financing, ADB, EBRD, AfDB, IDB, UNEP and the chair of the CTCN AB agreed, during the coordination meetings organized by the GEF in June and November 2013, that modalities needed to be put in place to enable GEF Agencies engaged in climate technology transfer and financing projects[4] to share their experience and lessons learned with the CTCN AB and the TEC. The issue was again raised by the GEF secretariat during the third CTCN AB meeting. The GEF secretariat stands ready to further discuss with the CTCN AB opportunities for such exchange of experience in the near future.

[4] The GEF is supporting numerous climate technology transfer and financing initiatives at the regional and national level, as indicated in paragraphs 17 to 19.

43. Regarding the participation of financing institutions to the CTCN, the GEF has made the following suggestions to the CTCN AB regarding the CTCN:

(a) To develop modalities to enable financing institutions such as the Development Banks to respond to requests sent to the CTC by Nationally Designated Entities (NDEs). Regional Development Banks have expressed their willingness to consider responding, when possible, to requests addressed to the CTC provided that these requests correspond to their financing criteria. The current CTCN member selection criteria and work plan do not appear to be adapted to institutions focused on financing projects and activities;

(b) To include, in the CTCN work plan, activities aimed at (i) helping countries identify appropriate support/financing institution for the climate technology activities they have prioritized and (ii) supporting application to access financial support from these institutions;

(c) To share with financing institutions the results of CTCN request responses to enable them to take these results into account, especially when follow up implementation projects may be possible.

44. As part of its project review and approval process, the GEF seeks to identify projects that could provide practical experience or could play a useful part in the CTCN. The GEF supported climate technology transfer and financing regional and national projects mentioned paragraphs 17 to 19 are good examples of such potential for collaboration between the GEF and the CTCN. The GEF supported TNA projects are also designed with the intent to seek close coordination with the CTCN and the regional Climate Technology Transfer and Financing projects funded by the GEF in Asia, Africa, Europe and Latin America. The result of the TNA processes and in particular the TAPs and project ideas may for instance be used to guide the supporting activities envisaged by the CTCN.

Appendix 1. Technology Transfer Projects Support in line with the Long-Term Program on Technology Transfer

1. This appendix summarizes the status of preparation and implementation of GEF supported initiatives under the first item of the Long-Term Program on Technology Transfer: Support for Climate Technology Centers and a Climate Technology Network. The appendix presents the progress made by the GEF Agencies in the delivery of the associated projects and summarizes experiences gained and lessons learned so far.

2. In December 2008, COP 14 welcomed the GEF's Strategic Program on Technology Transfer (renaming it the Poznan Strategic Program on Technology Transfer) as a step toward scaling up the level of investment in the transfer of ESTs to developing countries. In response to decision 2/CP.14, the GEF submitted a Long-Term Program on Technology Transfer to COP 16. The GEF submission included the following elements to further scale up investment in ESTs in developing countries in accordance with the GEF climate change strategy, and to enhance technology transfer activities under the Convention:

   (a) Support for Climate Technology Centers and a Climate Technology Network;

   (b) Piloting Priority Technology Projects to Foster Innovation and Investments;

   (c) PPP for Technology Transfer;

   (d) Support for TNAs; and

   (e) GEF as a Catalytic Supporting Institution for Technology Transfer

3. The GEF funded regional and national projects supporting climate technology centers, networks for climate technology transfer and financing are in early phases of implementation. Information on their implementation status and experience, provided by the GEF Agencies concerned, is summarized below.

4. ***Pilot Asia-Pacific Climate Technology Network and Finance Center (ADB and UNEP).*** The project was endorsed by the GEF CEO in May 2012, and has started implementation. Its second steering committee meeting (with ADB, UNEP, and the GEF) was held in November 2013 during COP 19 in Warsaw, Poland.

5. This project objective is to pilot a regional approach to facilitating deployment of climate technologies (mitigation and adaptation) that combines capacity development, enhancement of enabling environments for market transformation, financial investments and investment facilitation.

6. As of March 2014, the following progress has been reported:

   (a) Activities to mainstream climate technology into development plans and strategies are ongoing in People's Republic of China (PRC), Bhutan, and Bangladesh:

      - A climate change risk assessment was completed for Bhutan including guidance on using climate technologies to cope with these risks, which has been reflected into their Country Partnership Strategy with ADB.

- In PRC, activities to integrate climate technologies into the provincial development planning of Hunan and Ningxia are ongoing. They have already resulted in a number of climate technology linkages being established and follow-up activities being initiated. A local Climate Technology Finance Center was established in Ningxia while a climate technology investment fund is being set up in Hunan.

- In Bangladesh, the project provides support to assess options for scaling up rural solar and wind hybrid energy technologies for a pilot project to deploy rural renewable power at a sufficient scale to allow productive transformation of the rural economy. ADB also identified a cluster of projects from the public sector project pipeline that can benefit from similar input on climate technology selection during their project development stage (projects related to flood risk technologies as an adaptation measure).

(b) A partnership with a local venture capital fund in India is being set up to support a capacity development program for early stage cleantech entrepreneurs. The first of two boot camps have been organized and mentoring activities are ongoing towards the selection of at least three cleantech start-ups for investment. A second boot camp is expected to be held in April 2014.

(c) A first round of meetings with active venture capital (VC) funds in PRC has been completed with several local funds showing interest to cooperate with ADB for climate technology assistance.

(d) A Low Carbon Technology Marketplace Seminar was organized on September 10, 2013 in Singapore as part of a regional stakeholder engagement and consultation exercise in preparation for setting up the climate technology market place. Awareness and network building among potential partners and stakeholders in PRC, India, and selected countries in Europe, North America and other parts of Asia has been undertaken.

(e) A number of capacity building training programmes were jointly organized with other relevant partners on waste agriculture biomass technologies, buildings, and NDE capacity building with the CTCN.

(f) A market study and assessment report for electric fans is in being conducted in ASEAN and selected south Asian countries. This will enable countries and policy makers in each targeted country to understand the potential energy savings and available mechanisms to realize these savings through the introduction of energy efficient electric fans. The study and assessment aim to provide both national and regional perspectives.

(g) Work is under way to develop national and regional roadmaps to implement harmonized Energy Efficiency standards in the ASEAN countries.

7. Many of the project countries (e.g. Cambodia, Bhutan, Bangladesh, Uzbekistan, Malaysia, Indonesia, Philippines, Nepal, Kazakhstan and Thailand) have decided that their NDEs are the best entry point to ensure sustainability of the activities implemented under the project (i.e. ensuring continued country-led networking and stakeholder engagement to foster action on climate technology transfer after project completion). The project supported the building of their capacities to identify and develop technology support requests through national stakeholders' consultations. A network of these focal points has been formed to exchange information, experience and best practices. Work towards identification of climate technology institutions is in progress which at a later date could be part of the CTCN.

8. The project experience to date highlights the following elements.

(a) There is a need to engage key stakeholders and partners early in the process to increase the chances of climate technologies being systematically considered in the planning and investment processes.

(b) Procedures and tools developed for mainstreaming climate technologies into the Country Partnership Strategy of ADB developing member countries will benefit other processes of incorporating climate technologies into development planning; these can also provide feedback into how TNAs are conducted.

(c) The initial lessons from the implementation that have been documented (particularly regarding technology selection methodologies) may be relevant for the broader effort of establishing CTCN.

(d) The needs and demand for knowledge and technical advisory services from VC funds differ substantially among countries and also among funds, and appear contingent on how developed the cleantech ecosystem is and the extent of available government support. To facilitate and accelerate VC investments in climate technologies, it is imperative to tailor technical advisory support to their particular needs and demands.

(e) The ADB's engagement with VC funds in India and PRC has identified critical gaps in public support which should be beneficial for the CTCN when it is engaging with private players to promote climate technology products and trying to find innovative finance mechanisms to overcome barriers for private investors.

(f) There is a strong need for an independent, technology and vendor-agnostic (i.e., climate technologies not tied to specific manufacturers) "marketplace" platform capable of integrating different technologies for optimal solution delivery to end users. This will support smaller and less financially bankable LCT projects which can have significant cumulative impact if there is a wide uptake.

(g) Providing SMEs with access to technology buyers, sellers and other intermediaries to which otherwise do not have the resources and international network for such outreach, is important.

9. Over the next months the project has planned the following outreach activities:

(a) The Asia Clean Energy Forum (16-20 June 2014) will be used to showcase the project activities. ADB is preparing a proposal for a deep dive workshop as part of the program on 19 June.

(b) Several workshops are being planned for Bangladesh and PRC as part of the mainstreaming subproject, including a high level workshop in PRC during the second half of 2014.

(c) Quarterly market review newsletters highlighting developments in VC as well as two technology/country assessment reports will be produced in 2014 to help fund managers gain better understanding of the cleantech market.

(d) A second Infuse Ventures - ADB boot camp will be held in India in late April 2014; and a joint collaboration meeting between World Bank and ADB for Proof-of-Concept boot camp will be held in Hanoi, Viet Nam in April 2014.

10. ***Regional Climate Technology Transfer Center (EBRD).*** The project has been endorsed by the GEF CEO in July 2013 and has started implementation.

11. It aims to accelerate investments in climate change mitigation and adaptation technologies in the Early Transition Countries (ETCs) by combining regional technology transfer networking, technical assistance

(for policy makers and projects) with financial support and mechanisms. The project is designed to kick-start the market for climate technology investments in the ETCs.

12. The project has already successfully stimulated the introduction of best available climate technologies and techniques as part of EBRD projects (e.g. tri-generation, Light Emitting Diode – LED- lighting, energy management systems).

13. The total number of projects to be supported with GEF funding is likely to range between 25 and 35. The amount of funding committed has reached 14% out of the GEF Trust Fund funding (after five months of the operation) with support committed to five projects and five other projects already in the pipeline. The first grants are likely to be disbursed in second half of 2014.

14. For the technical assistance and policy dialogue activities EBRD is finalizing agreements with other international organizations that may participate in the project, such as the International Energy Agency and the Food and Agriculture Organization.

15. The project has generated a lot of interest within EBRD. EBRD has already approved a project extension to Southern and Eastern Mediterranean countries of the EBRD region and is considering extensions to other countries.

16. EBRD is exploring opportunities for cooperating with the CTCN on policy dialogue activities and stakeholder engagement. The EBRD may also use CTCN as a communication channel to disseminate findings of some of the project activities.

17. The project was also presented in various conferences in the EBRD region and beyond, namely through a conference on Water Efficiency in Amman (March, 2014) and during the UNFCCC Technical expert meeting on energy efficiency in Bonn (March 2014).

18. ***Climate Technology Transfer Mechanisms and Networks in Latin America and the Caribbean (IDB).*** The project was approved by the GEF Council in June 2012. It is completing the preparation of a full project proposal for GEF CEO Endorsement request expected to be submitted by May 2014.

19. Its aim is to promote the development and transfer of environmentally sustainable technologies in Latin America and the Caribbean (LAC), in order to contribute to the ultimate goal of reducing Greenhouse Gas (GHG) emissions and reducing the vulnerability to climate change in specific sectors in LAC. The Project's strategy is to build the national capacities to identify, assess, develop and transfer EST, focusing on (i) the promotion of and support to regional collaborative efforts; (ii) the support to planning and policy-making processes at national and sectoral levels; (iii) the demonstration of policies and enabling mechanisms; and, (iv) the mobilization of private and public financial and human resources.

20. The IDB is collaborating with UNEP with a view to ensuring that the efforts under the project will also contribute to the region´s capabilities to engage with and participate in the technology mechanism under the United Nations Framework Convention on Climate Change. The IDB and UNEP have identified potential collaborations around the objectives on regional capacity building, as well as enhanced interaction with regional organizations that are also members of the UNEP-led consortium hosting the CTCN. One such organizations, CATIE, has also been selected under the project as the leading organization for the activities focusing on the forestry sector. Similar discussions are underway with Fundación Bariloche, another member of the CTCN consortium based in Latin America.

21. ***Pilot African Climate Technology Finance Center and Network (AfDB).*** The project was approved by the GEF Council in June 2012, and is expected to be endorsed by the GEF CEO by May 2014.

22. The project aims to support on the ground the deployment of technologies for both climate change mitigation and adaptation in developing countries of Africa by (i) catalyzing public and private finance for low-carbon technologies and climate resilient development projects and (ii) assisting with integrating technology transfer considerations into developing countries' policies and investment programs and strengthening design and enforcement capacities of public institutions. It seeks thus to overcome several barriers to technology transfer and especially the lack of information and awareness-raising the lack of access to finance, the lack of adequate policies, technical limitations, the lack of human capacity and the lack of institutional capacity.

23. As this project relates to the CTCN, AfDB has participated in stakeholders meetings and workshops under the UNFCCC technology mechanism. This has enabled to build synergies with partners, which had not been identified previously such as ENDA (Environmental Development Action, Dakar, Senegal).

24. ***Enhancing Capacity, Knowledge and Technology Support to Build Climate Resilience of Vulnerable Developing Countries (UNEP).*** The project was endorsed in January 2013 and has started implementation.

25. The project aims at reducing risks from increased desertification, floods and erosion, and sea level rise to the target communities in the identified project sites in Mauritania, Nepal and Seychelles respectively. The best practices from on-the-ground interventions supported through the SCCF grant will be disseminated through the regional networks that are a part of the proposed project. The project will also contribute towards developing evidence based indicators for Ecosystem-based approaches to Adaptation. The project will be based in China with China's National Development and Reform Commission (NDRC) as the main executing partner. Project will leverage a number of existing programs such as the South-South Cooperation, Africa Adaptation Network, the Global Adaptation to Climate Change Network and Asia-Pacific Adaptation Network.

26. The project has initiated several workshops with international experts, policy-makers and project implementers in the fields of climate change adaptation, particularly with a focus on Ecosystem-based Adaptation (EbA). The outcomes of these workshops have been summarized in reports to inform ongoing and future initiatives related to EbA and climate change adaptation in general and will be made available through an open-access internet forum.

27. In addition to the workshops hosted by the project, a Ministerial Roundtable on EbA in the context of South-South cooperation was organized at the China Pavilion of the UNFCCC COP19 in Warsaw. This event was co-organised by NDRC and UNEP-International Ecosystem Management Partnership (UNEP-IEMP) and was attended by over 100 participants. The event shared knowledge, good practices and policy options on EbA with the aim of promoting South-South cooperation on climate change under the umbrella of UNFCCC and mainstreaming EBA into National Adaptation Plans (NAPs).

28. The information gathered by the project is expected to be referenced as part of the Knowledge Management System of the CTCN.

29. The project experience to date highlights the following key findings:

    (a) It is important to contextualize EbA within relevant broader contexts such as the National Adaptation Plan (NAP) process to ensure that it is not a stand-alone activity;

(b) There is a lack of long-term information to support assessments of the efficacy and cost-effectiveness of the EbA approach. There is therefore a need for long-term research and rigorous monitoring and evaluation for evidence-based decision-making;

30. The project is developing an open-access internet platform for disseminating EbA case studies and best-practice guidelines.

31. The implementation of EbA demonstration activities in pilot countries (Nepal, Mauritania and Seychelles) is anticipated to be initiated in the second and third quarters of 2014

32. The project is planning to produce a documentary film on ecosystem based adaptation for the UNFCCC COP 20.

33. ***Facility for Low Carbon Technology Deployment (World Bank).*** The project was approved by the GEF Council in June 2012. The World Bank is currently preparing the full project proposal for GEF CEO Endorsement request expected to be submitted by the end of June 2014. This project aims to facilitate identification and deployment of low carbon technologies in India that can address technology gaps to mitigate climate change and improve the economy's energy efficiency. The project will do so through a Facility for Low Carbon Technology Deployment that will bring together government, industry, consumer, academia, and CSO representatives. Four key technology areas are identified to begin operations: refrigeration, air conditioning, lighting, and low-temperature waste heat recovery. It is proposed to be part of the CTCN at the national level.

34. ***Mexico Sustainable Energy Technology Development (World Bank).*** The project was approved by the GEF Council in June 2013 and is expected to be endorsed by the GEF CEO in April 2014. The project objective is to support the development of new and innovative clean energy technologies (energy efficiency, renewable energy) through the linking of the public, academic and productive sectors in Mexico. This will be achieved through (i) the identification of local clean energy technology needs and available capabilities at the regional level among public and private sector stakeholders; (ii) the creation of regional Strategic Alliances and Innovation Networks for Competitiveness on clean energy for a set of potentially high-impact technologies; (iii) the identification of portfolios of high-impact projects in clean energy technology involving the private sector; and (iv) the support and funding of these high-impact projects involving the private sector.

35. The project will be coordinated with the CTCN NDE for Mexico and with the Inter-American Development Bank project "*Climate Technology Transfer Mechanisms and Networks in Latin America and the Caribbean*" to make use of potential complementarity and avoid redundancy and duplication of efforts.

36. ***GEF UNIDO Cleantech Programme.*** This program regroups MSPs proposed under the GEF Private Sector Strategy support for innovation and entrepreneurship among small and medium enterprise (SMEs). UNIDO is leading the SME innovation effort, and has worked with GEFSEC to develop a targeted list of countries for similar MSPs. Six Cleantech projects have been approved so far in Armenia, India, Malaysia, Pakistan, South Africa and Turkey. The programme will (i) strengthen policy and regulatory framework to support innovation; (ii) build capacity for the organization of competition and acceleration programs, and (iii) organize annual clean energy technology innovation and competition entrepreneurship acceleration programs.

37. The GEF/UNIDO Global Cleantech Programme for SMEs has been under implementation since November 8, 2013. An Intensive Cleantech Training Programme for National Project Managers and project counterparts was organized by UNIDO in Vienna on March 12 to 15, 2014 to provide detailed

training to participants and discuss cross-cutting global issues. This training was conducted in preparation for the launch of the first year of the Cleantech Accelerator Programmes in six countries, including Armenia, India, Malaysia, Pakistan, South Africa, and Turkey. The key output of this training was to introduce project teams to the US Cleantech Open Model and discuss its adaption to the national contexts. It is foreseen that the entrepreneurs supported under the project will become prime candidates to partner with the CTCN. The first cleantech national award ceremonies are expected to be held in October 2014.

38. ***Local Development and Promotion of LED Technologies for Advanced General Lighting (UNIDO).*** This project was approved by the CEO in October 2013 and is undergoing the preparation of a detailed project proposal. The project has two main objectives: (i) supporting quality improvement of LED manufacturing in Vietnam to meet international quality standards, and (ii) increasing the use of LEDs in buildings.

Appendix 2. Implementation of the Poznan Strategic Program on Technology Transfer

1. This appendix summarizes the status of preparations and implementation under the Technology Transfer Pilot Projects supported within the framework of the Poznan Strategic Program on Technology Transfer. The appendix presents the progress made by the GEF Implementing Agencies in the delivery of pilot projects and summarizes experiences gained and lessons learned so far, as requested in the SBI 36 agenda item 12 conclusions (see Part II of this document for overall reporting on the progress of the Poznan Strategic Program on Technology Transfer).

2. As indicated in paragraph 13 in this document, the call for proposals for technology transfer pilot projects under window two of the Poznan Strategic Program issued in March 2009 by the GEF CEO led to the selection of 14 proposals of pilot projects for funding, including 13 Full-Sized Projects (FSPs) and one MSP. Only one proposal for adaptation was received for a project in Jordan; this proposal was funded, along with three other proposals that included adaptation elements. The total funding from the GEF Trust Fund and SCCF-B for the 14 pilot projects amounted to initially $58 million, and total co-financing for these projects initially came to more than $195 million.

3. As of March 2014, GEF Agencies charged with implementing these 14 pilot projects have reported progress in project preparation and implementation (see Table A5) :

   (a) Eleven projects have been endorsed by the GEF CEO and are progressing in their implementation. These projects are taking place in Cambodia, Chile, China, Colombia, Cote d'Ivoire, Jordan, Kenya, Mexico, Russia, Sri Lanka, Swaziland and Thailand. The funding from the GEF Trust Fund and SCCF-B for these project amounts respectively to $49.4 million and $2.4 million, and the total co-financing amounts respectively to $223.2 million and $5.5 million.

   (b) Three projects were cancelled upon request from the GEF Agencies and/or the concerned national government, one in July 2011, one in February 2012 and one in June 2012.

4. Information, provided by the GEF Agencies concerned, on the implementation status and experience of the eleven CEO-endorsed projects during the reporting period is summarized below:

   (a) ***Cambodia: Climate Change related Technology Transfer for Cambodia: Using Agricultural Residue Biomass for Sustainable Energy Solutions (UNIDO).*** The project is under implementation following GEF CEO Endorsement in May 2012.

   During the implementation of the project, contacts with technology suppliers from Cambodia, India, and Thailand have been developed and 30 technical and financial quotations of the biomass technology have been finalized. Two companies have already committed for 1.5 and 2 MW power plants that were later expanded to 3 MW each.

   In addition, the project is also providing technical assistance to private investors, interested to promote biomass based power plant In Cambodia. A company in association with the project is working on feasibility studies to invest in 4 power plants using agro-residue waste.

   Sub-regional Dissemination Workshop on Converting Waste Agricultural Biomass into Energy South-East Asia was conducted (6-7 November 2013). The purpose of this workshop was to share the results achieved and lessons learnt. The workshop also served as a platform for the participants to discuss the situation of waste agricultural biomass in their respective countries and identify ways and means to cooperate with each other and thus replicate the project carried out in Cambodia.

At this project stage, the following lessons learned can be highlighted: (i) potential investments have to find the right balance between potentially fluctuating biomass waste resources and energy needs; (ii) there is a lack of policy instruments (such as feed in tariff) and standardized contractual arrangements (such as power purchase agreements) that hamper the use of renewable energy sources and the sale of surplus power by industrial establishment.

(b) ***Chile: Promotion and Development of Local Solar Technologies in Chile (IDB).*** The project was endorsed by the GEF CEO in June 2012. The project started implementation in November 2013. The project has begun to disburse in March 2014. Only the Project Execution Unit has been set up so far.

The Project will include: (i) the development of standards and monitoring protocols for solar panels and solar systems; (ii) training for public and private stakeholders on Concentrated Solar Power and Photovoltaic Systems, and (iii) public awareness campaign to promote solar technology projects for both solar water heating and power generation.

A verbal agreement was reached with the four largest energy distribution companies in Chile to collaborate and support the implementation of distributed solar PV. While a net billing law exists in Chile, there are virtually no applications of distributed solar PV exist since the necessary bylaws have not been developed. This project will be critical for field testing distributed solar PV applications and developing the adequate bylaws that will support its growth throughout the country.

(c) ***China: Green Truck Demonstration Project (WB).*** Following its endorsement by the GEF CEO in March 2011, the project was launched in October 2011.

Through Phase I of Green Truck Technology Demonstration, three technologies were proved to have very marginal or no fuel-saving effects and will be eliminated from Phase II demonstration. Meanwhile, two new technologies – light-weighted aluminum allot trailers and LNG trucks – demonstrated considerable fuel-saving benefits and market popularity. Both technologies are under consideration for Phase II demonstration.

Monetary costs for some of Phase I technologies are relatively low, while transaction costs are relatively high (e.g. installation, tuning, and depreciation of regular tires). This creates reluctance for the pilot companies to apply demonstrated technology products, and lowers the attractiveness of corresponding subsidies and awards. As business expands, most trucking companies express strong interest in subsidies for new truck procurement, as it involves large capital expenditures for trucking companies. In Phase II demonstration the implementation agency will carefully assess and accommodate those needs from pilot companies, to scale up the demonstration effects.

The project organized the "Green Freight, Guangdong First" Forum on September 27th, 2013 in Guangdong. Guangdong Provincial Department of Transport (DoT) awarded a certificate of "Guangdong Green Freight Demonstration Company" to each of the ten trucking companies participating in the Phase I of green truck technology demonstration. The event was highlighted by the signing of an "Agreement on Cooperation for Green Freight Development in Guangdong" between the Xingye Bank and the Provincial DoT. The Xingye Bank reached an agreement with the Guangdong Provincial DoT, and several local companies in Guangdong on a concept for a green freight financing pilot project. The implementation details are now being worked out.

With China's logistics sector booming, many large trucking companies are expanding their fleets. Capital needs for this expansion is mounting, which brings opportunities not only for scale-up of the green freight technologies and practices, but also for tapping private sector resources for leverage.

Some innovations of the Green Freight Demonstration are being adopted in Brazil. Clean Air Asia,

one of the Bank's partners in green freight in China, has started a pan-Asian green freight program with support from donors and the private sector. To further enhance the project influence, the project team will participate to the China (Shenzhen) International Logistics and Transportation Fair on October 14 to 16, 2014.

(d) ***Colombia, Kenya, Swaziland; SolarChill: Commercialization and Transfer (UNEP).*** This project was initially approved with the World Bank as the Implementing Agency. However, the World Bank withdrew in 2010 from the project. The project was then re-submitted by UNEP with the addition of Swaziland. The project has been endorsed by the GEF CEO in February 2014 and is expected start implementation soon.

(e) ***Cote d'Ivoire: Construction of 1000 Ton per day Municipal Solid Wastes Composting Unit in Akouedo Abidjan (AfDB).*** This project has been endorsed by the GEF CEO in October 2013 and is expected to start implementation soon. The project preparation faced significant challenges, as it coincided with the period of instability in the country, with changes in the political environment as well as in government priorities. The project implementation has been delayed in order to integrate it into a larger sustainable city planning project that could serve as a basis for GEF-6.

(f) ***Jordan: DHRS Irrigation Technology Pilot Project to Face Climate Change Impact (IFAD).*** This adaptation project seeks to reduce the vulnerability of irrigated agriculture to climate change by testing innovative and efficient water-use technologies. The project was endorsed by the GEF CEO in May 2011 and has been re-designed, as initial field trials carried out during the project inception showed that the proposed technologies did not perform as expected under the local conditions. As a result, the Project Steering Committee has decided to adopt alternative technologies for improved water-use efficiency. Due to the need for the re-design, the project is still at a very early stage of implementation. The project has finalized its work plan for the two coming years and developed solid partnerships that will help speed up project implementation.

(g) ***Mexico: Promotion and Development of Local Wind Technologies in Mexico (IDB).*** The project was approved by IDB in May 2012, following the GEF CEO Endorsement in December 2011. The project implementation started in May 201. The general objective of the Project is to enable the local development of wind turbines for distributed generation and contribute to enhance Mexico's local capacities in wind energy technology.

Due to recent definition of the National Strategy for Renewable Energies, disbursements of the project had experienced some delays. It has only disbursed 0.83% of project resources. The project trained 80 people for the construction, installation, operation and maintenance of the Class I-A Wind Turbine. The project will provide four training courses in the Regional Wind Technology Centre to improve installation, operation and maintenance skills for distributed generation wind power applications.

(h) ***Russian Federation: Phase out of HCFCs and Promotion of HFC-free Energy Efficient Refrigeration and Air-Conditioning Systems in the Russian Federation through Technology Transfer (UNIDO).*** The project has started its implementation in March 2011.

A set of legislation and regulations are now in place at the federal and government level to ensure a successful implementation of obligations under the Montreal Protocol. A robust enforcement mechanism is also in place for the control of the import, movement and consumption of Ozone Depleting Substances (ODS) with a range of punitive measures including imprisonment for serious offences. These achievements made significant impact on the prioritization of HCFC phase out across the foam and refrigeration sectors and some foreign owned enterprises that have converted to

non-ODS technology voluntarily ahead of the legal obligation. The strategy developed by the Government is to bypass the adoption of HFCs, by encouraging and facilitating the adoption of Low global warming potential (GWP) solutions, emphasizing natural refrigerants such as ammonia and hydrocarbons, used in appropriate applications supplemented by the use of hydrofluoroolefin (HFOs) which is still in the development phase.

The project supported the conversion of two factories to non-ODS low GWP substances. One is completed and the production started in March 2014. The second one is going to be completed. Conversion activities at several other foam manufacturers are now underway.

The nature of the market has made it challenging to get stakeholders to invest in energy efficiency without any legal or financial imperative to change. Therefore the project strategy is to first create the legal imperative to phase out HCFCs, then to demonstrate the potential energy (and operating cost) savings that can be achieved by efficient natural refrigerant and foaming agent designs. The programme is now at the point where such a legal framework is in place and it is becoming much easier to engage stakeholders in the discussion on energy efficiency.

A Centre of Excellence (Microclimate, Energy Efficiency and Building Automation) was established in Moscow and is promoting high efficiency refrigeration systems and train refrigeration technicians (ongoing technical training organized at three facilities). Besides the project already support several training courses: (i) for officials of the Federal Customs Service and Ministry of the Interior of the Russian Federation in November 2013; (ii) on Preventing Illegal ODS Importation in November 2013, and (iii) a joint (Russian Federation/Turkmenistan) training session dedicated to the use of natural refrigerants as alternatives to ozone depleting substances under phase-out.

The project helped organize a conference titled "Natural refrigerant ammonia. Chemical and technical security of the Russian Federation" on 16 October 2013 in Moscow, attended by more than 100 representatives of Russian ministries, trade associations, research institutes, public and private users of refrigerating systems, Russian and foreign producers of natural refrigerant-based systems. The project team also participated to the Conference on Research-to-Practice Conference in Enhancement of Reliability and Efficiency of Refrigerating and Petrochemical Equipment held on November 12-13 2013.

The project supported website dedicated to the ozone issues (www.ozoneprogram.ru) is updated on a regular basis.

(i) ***Senegal: Typha-based Thermal Insulation Material Production in Senegal (United Nations Development Program - UNDP).*** The project was endorsed by the GEF CEO in August 2012. It started implementation in November 2013.

During the first months of the implementation: (i) the project has identified several additional techniques to use the Typha as insulation material, beyond the two techniques (Typha-cement and Typha-earth) presented during the preparatory phase, (ii) the project succeeded in bringing together national institutions (Ministry of Environment, Ministry of Energy, Ministry of Urbanization, Energy Efficiency Agency, Ministry of Education & Professional training, etc…) to work together, and (iii) it developed training on insulation techniques; and on Typha plant harvesting for local producers.

(j) ***Sri Lanka: Bamboo Processing for Sri Lanka (UNIDO).*** The project was endorsed by the GEF CEO in April 2012. The launching of the project took place in September 2012.

The project designed and implemented a pilot for supply of pre-processed bamboo materials & production of semi-mechanized bamboo product at the village level involving below poverty line families. In the process the project also improved the capacity of a Community Based Organisation. This pilot helped understanding the operating dynamics at the community level so as to develop a sustainable bamboo value chain to be replicated at a pan country level.

The project also conducted the first assessment regarding energy application for bamboo material. This information is needed to develop supply chain of bamboo energy feed stock and to establish pricing of bamboo material for energy use. Since the moisture content and different bulk density vary with the condition of production such as species, harvested time, sites etc., consideration of comparable/standardized measurement of calorific value or dry matter per unit volume or mass is important for the future market pricing of bamboo feedstock.

(k) ***Thailand: Overcoming Policy, Market and Technological Barriers to Support Technological Innovation and South-South Technology Transfer: The Pilot Case of Ethanol Production from Cassava (UNIDO).*** The project was endorsed by the GEF CEO in March 2012.

Due to political uncertainty and turmoil in Thailand, the project started implementation in November 2013. The first project steering committee was held in Bangkok in December 2013. Since then the project: (i) started dialogues and meetings with private sector including potential ethanol producers, experts, banks and financial institutes in Lao PDR and Myanmar; and (ii) started to design a demonstration plant in Thailand with a capacity 100 liters of ethanol/day.

Appendix 3. Implementation Progress of Technology Transfer Pilot Projects Under the Poznan Strategic Program (as of March 30, 2014)

GEF ID	*Country*	*Agency*	*Title*	*GEF Poznan Program Funding ($ millions)*[a]	*Total GEF Funding ($ millions)*[a]	*Co-financing ($ millions)*	*Status of Project*
4040	Brazil	UNDP	Renewable CO_2 Capture and Storage from Sugar Fermentation Industry in Sao Paulo State	3.0	3.0	7.7[b]	The project was cancelled in February 2012 upon request from the Agency. The project preparation identified investment costs far higher than initially expected, exceeding the available financing.
4042	Cambodia	UNIDO	Climate Change Related Technology Transfer for Cambodia: Using Agricultural Residue Biomass for Sustainable Energy Solutions	1.9	1.9	4.6[c]	The project was endorsed by the GEF CEO in May 2012. The project is under implementation.
4136	Chile	IDB	Promotion and Development of Local Solar Technologies in Chile	3.0	3.0	31.8[c]	The project was endorsed by the GEF CEO in June 2012. The project is under implementation.
4119	China	WB	Green Truck Demonstration Project	3.0	4.9	9.8[c]	The project was endorsed by the GEF CEO in March 2011. The project is under implementation.
4682	Colombia, Kenya, Swaziland	UNEP	SolarChill: Commercialization and Transfer	2.8	3.0	8.0[c]	The project has been endorsed by the GEF CEO in February 2014 and is expected start implementation soon.
4071	Cote d'Ivoire	AfDB	Construction of 1000 Ton-per-day Municipal Solid Waste Composting Unit in Akouedo Abidjan	3.0	3.0	36.9[c]	This project has been endorsed by the GEF CEO in October 2013 and is expected to start implementation soon.
4060	Jamaica	UNDP	Introduction of Renewable Wave Energy Technologies for the Generation of Electric Power in Small Coastal Communities	0.8	0.8	1.4[b]	The project was cancelled in October 2011 upon request from the Agency.
4036	Jordan	IFAD	DHRS Irrigation Technology Pilot Project to Face Climate Change Impact	2.4	2.4	5.5[c]	The project was endorsed by the GEF CEO in August 2011. Project implementation is underway.
4132	Mexico	IDB	Promotion and Development of Local Wind Technologies in Mexico	3.0	5.5	33.7[c]	Project was endorsed by the GEF CEO in December 2011. Project implementation started in May 2013.

GEF ID	*Country*	*Agency*	*Title*	*GEF Poznan Program Funding ($ millions)*[a]	*Total GEF Funding ($ millions)*[a]	*Co-financing ($ millions)*	*Status of Project*
4120	Russia Federation	UNIDO	Phase-out of HCFCs and Promotion of HFC-free Energy Efficient Refrigeration and Air-Conditioning Systems in the Russian Federation through Technology Transfer	3.0	20.0	40.0[c]	The project was endorsed by the GEF CEO in August 2010. Project implementation is underway.
4055	Senegal	UNDP	Typha-based Thermal Insulation Material Production in Senegal	2.3	2.3	5.6[c]	The project was endorsed by the GEF CEO in August 2012 and has started implementation.
4114	Sri Lanka	UNIDO	Bamboo Processing for Sri Lanka	2.7	2.7	21.3[c]	The project was endorsed by the GEF CEO in April 2012. The project is under implementation.
4037	Thailand	UNIDO	Overcoming Policy, Market and Technological Barriers to Support Technological Innovation and South-South Technology Transfer: The Pilot Case of Ethanol Production from Cassava	3.0	3.0	31.6[c]	The project was endorsed by the GEF CEO in March 2012 and has started implementation.
4032	Turkey, Cook Islands	UNIDO	Realizing Hydrogen Energy Installations on Small Island through Technology Cooperation	3.0	3.0	3.5[b]	The project was cancelled in March 2012 upon request from the Agency following changes in the concerned governments' priorities.
			TOTAL	**36.9**	**58.6**	**241.4**	
			Total (cancelled projects excluded)	**30.1**	**51.6**	**228.8**	

[a] Includes Agency fees and project preparation grants
[b] Co-financing amount at the GEF Council Approval
[c] Co-financing amount at the GEF CEO Endorsement

Appendix 4. Climate change technology transfer projects supported in line with the Long-Term Program on Technology Transfer

This Annex lists the Piloting Priority Technology Projects approved by the GEF during the reporting period (July 2013 to March 2014) to Foster Innovation and Investments.

Table 2

Climate change mitigation technology transfer projects supported in line with the Long-Term Program on Technology Transfer during the reporting period (July 2013 to March 2014)

Country	*Agency*	*Title*	*GEF Amount ($ millions)*	*Co-financing ($ millions)*	*Total ($ millions)*
Afghanistan	FAO	Reducing GHG Emissions Through Community Forests and Sustainable Biomass Energy	1.9	7.0	8.9
Albania	UNIDO	Biomass Energy for Productive Use for Small and Medium Enterprises (SMEs) in the Olive Oil Sector	1.0	4.5	5.5
Algeria	UNDP	Integrated Municipal Management Model of Household and Similar Waste with Low Greenhouse Gas Emissions	3.5	14.2	17.7
Armenia	UNDP	Mainstreaming Sustainable Land and Forest Management in Dry Mountain Landscapes	3.3	14.0	17.2
Barbados	UNDP	Promoting Solar Photovoltaic Systems in Public Buildings for Clean Energy Access, Increased Climate Resilience and Disaster Risk Management	1.9	16.5	18.3
Bosnia-Herzegovina	UNDP	Third National Communication (TNC)	0.5	0.1	0.7
Botswana	UNDP	Promoting Production and Utilization of Biomethane from Agro-Waste in South-Eastern Botswana	2.9	14.9	17.8
Cabo Verde	UNDP	Removing Barriers to Energy-Efficiency in the Cape Verdean Built Environment and for Appliances	2.1	6.7	8.8
Cambodia	UNIDO	Reduction of GHG Emission through Promotion of Commercial Biogas Plants	1.6	8.2	9.9
Chile	UNIDO	Promoting The Development of Biogas Energy amongst Select Small- and Medium-Sized Agro-Industries	1.9	8.7	10.5
China	UNDP	Promoting Energy Efficient Electric Motors in Chinese Industries	3.8	17.7	21.5
China	UNDP	Greening the Logistics Industry in Zhejiang Province	3.2	12.1	15.3
China	UNDP	Enabling Solid State Lighting Market Transformation Promotion of Light Emitting Diode Lighting	6.8	26.3	33.1
Colombia	World Bank	Forest Conservation and Sustainability in the Heart of the Colombian Amazon	11.3	30.0	41.3
Congo	UNDP	Small Hydropower-based Mini-grids for Rural Electrification	2.1	13.5	15.6
Congo DR	FAO	Community-Based Miombo Forest Management in South East Katanga	5.0	10.0	15.0
Congo DR	UNDP	Promotion of Mini and Micro-hydro Power Plants in Congo DR	3.6	13.5	17.1
Cote d'Ivoire	UNEP	Preparation of Côte d'Ivoire's Initial Biennial Update Report to UNFCCC	0.4	0.0	0.4
Ethiopia	UNDP	Promoting Sustainable Rural Energy Technologies (RETs) for Household and Productive Uses	4.5	38.0	42.5
Gambia	UNIDO	Reducing Greenhouse Gases and ODS Emissions through Technology Transfer in the Industrial Refrigeration and Air Conditioning Sector	0.5	2.5	3.0
Gambia	UNIDO	Greening the Productive Sectors in Gambia: Promoting the Use and Integration of Small to Medium Scale Renewable	1.4	3.0	4.4

		Energy Systems in the Productive Uses			
Georgia	UNDP	Green Cities - Integrated Sustainable Transport in the City of Batumi and the Ajara Region	0.9	5.4	6.3
Global	UNDP	Transforming The Global Aviation Sector: Emissions Reductions From International Aviation	2.1	8.3	10.4
Global	UNDP	Transforming the Global Maritime Transport Industry towards a Low Carbon Future through Improved Energy Efficiency	2.1	11.1	13.2
Haiti	UNEP	Ecosystem Approach to Haiti Cote Sud	6.8	21.1	27.9
Honduras	UNDP	Energy Efficiency Improvement in the Honduran Hotel Industry	1.3	8.3	9.7
India	UNDP	Market Transformation and Removal of Barriers for Effective Implementation of the State Level Climate Change Action Plans	4.1	25.0	29.1
Indonesia	UNDP	Market Transformation through Design and Implementation of Appropriate Mitigation Actions in Energy Sector	8.8	48.4	57.1
Indonesia	World Bank	Large Enterprises Energy Efficiency Project	6.0	244.0	250.0
Jamaica	UNDP	Third National Communication (TNC) and Biennial Update Report to the UNFCCC	0.9	0.2	1.1
Kuwait	UNEP	Enabling Kuwait to Prepare Its Second National Communication (SNC) and Biennial Update Report (BUR) to the UNFCCC	0.9	0.7	1.6
Madagascar	UNIDO	Increased Energy Access for Productive Use through Small Hydropower Development in Rural Areas	3.1	14.1	17.3
Malawi	UNDP	Increasing Access to Clean and Affordable Decentralized Energy Services in selected vulnerable areas of Malawi	1.9	12.6	14.5
Morocco	UNDP	Mainstreaming Climate Change in the National Logistics Strategy and Roll-Out of Integrated Logistics Platforms	2.5	17.6	20.0
Morocco	UNDP	Promoting the Development of Photovoltaic Pumping Systems for Irrigation	2.9	49.1	52.0
Namibia	UNDP	Namibia's First Biennial Update Report (BUR) to the UNFCCC	0.4	0.1	0.4
Nicaragua	UNDP	Third National Communication	0.5	0.0	0.6
Nigeria	UNDP	Promoting Low Carbon Energy Solutions in Nigeria Energy/Power Supply	4.8	167.0	171.8
Pakistan	UNIDO	GEF UNIDO Cleantech Programme for SMEs	1.5	4.0	5.5
Pakistan	UNDP	Sustainable Forest Management to Secure Multiple Benefits in High Conservation Value Forests	9.1	26.5	35.6
Paraguay	CI	Innovative Use of a Voluntary Payment for Environmental Services Scheme to Avoid and Reduce GHG Emissions and Enhance Carbon Stocks in the Highly Threatened Dry Chaco Forest Complex in Western Paraguay	2.4	7.0	9.4
Philippines	UNDP	Development for Renewable Energy Applications Mainstreaming and Market Sustainability (DREAMS) Project	5.7	24.8	30.5
Regional	ADB	ASTUD: Regional Knowledge Sharing	0.2	4.7	4.9
Regional	World Bank	Promotion of Clean and Green Cities in China Through International Cooperation	2.2	7.0	9.2
Russian Federation	EBRD	Green Shipping Programme for Russia	11.0	104.0	115.0
Russian Federation	UNIDO	Transfer of Environmentally Sound Technologies for Industrial Climate Change Mitigation in the Republic of Tatarstan, Russian Federation	11.5	57.0	68.6
Serbia	UNDP	Removing Barriers to Promote and Support Energy Management Systems in Municipalities (EMIS) throughout Serbia	2.5	9.3	11.9
South Africa	UNIDO	GEF UNIDO Cleatech Programme for SMEs in South Africa	2.2	6.0	8.2
South Africa	UNIDO	Industrial Energy Efficiency Improvement in South Africa through Mainstreaming the Introduction of Energy Management Systems and Energy Systems Optimization	6.3	27.6	33.9
Sri Lanka	UNDP	Appropriate Mitigation Actions in the Energy Generation and End-Use Sectors in Sri Lanka	2.0	13.0	15.0
Sudan	UNDP	Promoting the Use of Electric Water Pumps for Irrigation	4.8	26.8	31.5
Thailand	UNDP	Achieving Low Carbon Growth in Cities through Sustainable Urban Systems Management in Thailand	3.6	91.9	95.4

Turkey	UNIDO	GEF UNIDO Cleantech Programme for SMEs in Turkey	1.1	3.0	4.0
Turkmenistan	UNDP	Energy Efficiency and Renewable Energy for Sustainable Water Management in Turkmenistan	6.8	29.3	36.1
Ukraine	UNDP	Removing Barriers to Increase Investment in Energy-Efficiency in Public Buildings	6.0	22.0	28.0
Vanuatu	FAO	R2R: Integrated Sustainable Land and Coastal Management	5.0	14.0	19.0
Venezuela	FAO	Sustainable Forest Lands Management and Conservation under an Eco-social Approach	9.0	25.7	34.8
Venezuela	IADB	Promotion and Development of Renewable Energies through the Set-up of Mini-hydro Plants in Rural Communities Located in the Region of The Andes and the Southern Area of the Bolivarian Republic of Venezuela	5.1	16.8	21.9
Vietnam	UNIDO	Promotion of Energy Efficient Industrial Boiler Adoption and Operating Practices	1.9	9.7	11.6
Vietnam	UNDP	Local Development and Promotion of LED Technologies for Advanced General Lighting	1.7	6.2	7.8
Vietnam	UNDP	Energy Efficiency Improvement in Commercial and High-Rise Residential Buildings	3.5	16.2	19.7
Vietnam	UNIDO	Reducing Greenhouse Gas and ODS Emissions Through Technology Transfer in Industrial Refrigeration	0.3	1.9	2.2
		Total	**218.9**	**1448.5**	**1667.4**

Table 3

Climate change adaptation technology transfer projects supported in line with the Long-Term Program on Technology Transfer during the reporting period (July 2013 to March 2014)

Country	*Agency*	*Title*	*SCCF Amount ($ millions)*	*Co-financing ($ millions)*	*Total ($ millions)*
Angola	UNDP, UNEP	Addressing Urgent Coastal Adaptation Needs and Capacity Gaps in Angola	6.9	11.5	18.5
Congo DR	UNDP	Resilience of Muanda's communities from coastal erosion, Democratic Republic of Congo	6.0	16.5	22.5
Benin	UNDP	Strengthening the resilience of the energy sector in Benin to the impacts of climate change	9.0	30.0	39.0
Mozambique	FAO	Strengthening Capacities of Agricultural Producers to Cope with Climate Change for Increased Food Security through the Farmers Field School Approach	10.1	30.0	40.1
Zambia	UNDP	Promoting Climate Resilient Community-based Regeneration of Indigenous Forests in Zambia's Central Province	4.4	23.7	28.1
Bangladesh	UNEP	Ecosystem-based Approaches to Adaptation (EbA) in the Drought-prone Barind Tract and Haor wetland Area	5.8	17.0	22.8
Senegal	FAO	Mainstreaming Ecosystem-based Approaches to Climate-resilient Rural Livelihoods in Vulnerable Rural Areas through the Farmer Field School Methodology	7.0	29.9	36.9
Central African Republic	AfDB	Reducing Rural and Urban Vulnerability to Climate Change by the Provision of Water Supply	8.0	23.3	31.3
Haiti	UNEP	Ecosystem Approach to Haiti's Cote Sud	3.4	10.9	14.3
Senegal	UNDP	Strengthening land & ecosystem management under conditions of climate change in the Niayes and Casamance regions - Republic of Senegal	4.7	43.7	48.4
Myanmar	UNEP	Adapting Community Forestry landscapes and associated community livelihoods to a changing climate, in particular an increase in the frequency and intensity of extreme weather events	5.6	19.2	24.8
Mauritania	UNEP	Development of an improved and innovative delivery system for climate resilient livelihoods in Mauritania	5.6	11.9	17.5

Somalia	UNDP	Enhancing Climate Resilience of the Vulnerable Communities and Ecosystems in Somalia	9.0	37.1	46.1
Uganda	UNIDO	Reducing Vulnerability of Banana Producing Communities to Climate Change Through Banana Value Added Activities - Enhancing Food Security And Employment Generation	3.2	7.7	10.9
Madagascar	UNDP	Enhancing the adaptation capacities and resilience to climate change in rural communities in Analamanga, Atsinanana, Androy, Anosy, and Atsimo Andrefana	6.6	34.3	40.9
Bangladesh	FAO	Community-based Climate Resilient Fisheries and Aquaculture Development in Bangladesh	6.1	15.2	21.3
Sudan	IFAD	Livestock and Rangeland Resilience Program	9.4	25.0	34.4
Afghanistan	UNEP	Building Resilience of Communities Living Around the Northern Pistachio Belt (NPB) and Eastern Forest Complex (EFC) of Afghanistan through an EbA approach	7.7	7.0	14.7
Regional	FAO	Climate Change Adaptation in the Eastern Caribbean Fisheries Sector	6.1	34.9	41.0
Regional	UNEP	Building Climate Resilience of Urban Systems through Ecosystem-based Adaptation (EbA) in Latin America and the Caribbean	6.7	21.9	28.6
Morocco	IFAD	Increasing Productivity and Adaptive Capacities in Mountain Areas of Morocco (IPAC-MAM)	7.2	24.0	31.2
Bosnia-Herzegovina	UNDP	Technology Transfer for Climate Resilient Flood Management in Vrbas River Basin	5.6	12.5	18.2
Pakistan	UNIDO	Mainstreaming Climate Change Adaptation through Water Resource Management in Leather Industrial Zone Development	3.7	14.5	18.2
Belize	World Bank	Energy Resilience for Climate Adaptation	8.8	4.8	13.6
		Total	**156.5**	**506.5**	**663.0**

Appendix 5. GEF secretariat consultations with the CTCN

During the reporting period, the GEF secretariat consulted with the CTCN on numerous occasions:

(a) A meeting between the GEF CEO and the UNEP Executive Director was held in China on July 20, 2013 where coordination and cooperation among the two institutions, including CTCN, was discussed;

(b) The GEF secretariat participated as an observer to the second and third meeting of the CTCN AB, respectively held in Bonn on September 9 to 11, 2013 and in Copenhagen on March 19 to 21, 2014;

(c) The GEF secretariat and the chair of the CTCN AB held discussions on September 19, 2013;

(d) The GEF CEO, GEF secretariat personnel, and the chair of the CTCN AB discussed cooperation on 28 September 2013 in Nantes, France;

(e) The GEF secretariat and UNEP personnel held follow-up discussions on 30 Septemoer 2013 in Paris, France;

(f) The GEF secretariat met with UNEP and UNIDO in the margins of the November 2013 GEF Council meeting regarding GEF support to the CTCN;

(g) The GEF secretariat organized the second informal coordination meeting on the GEF supported regional Technology Transfer and Financing Centers on November 4, 2013 in Washington DC, at the margin of the 45th GEF Council meeting. Participants to the meeting included ADB, UNEP, IDB, EBRD, AfDB, and the chair of the CTCN AB. These bi-annual meetings aimed to enable all participants to (i) monitor the progress of the regional projects and the CTCN, (ii) identify options for stronger collaboration, and (iii) identify experiences gained in these projects that can help the CTCN implementation;

(h) The GEF secretariat convened two teleconference discussions January 14 and February 19, 2014 with the CTCN AB Chair, the Director of the CTC, UNEP, UNIDO and the UNFCCC secretariat to identify concepts that would support the CTCN activities and fit in the GEF rules and procedures. This was further discussed with the same participants at the margin of the third CTCN AB meeting in Copenhagen on March 19 to 21, 2014.